

### ABSTRACT

According to one embodiment, an membrane electrolysis (ME) unit is configured with a first cell frame, a second cell frame each having a compartment. The collective compartments of these cell frames houses an anode, a cathode, a first membrane positioned between the anode and the cathode, and a plurality of screen spacers. A first screen spacer is positioned between the anode and the first membrane while a second screen spacer is positioned between the cathode and the first membrane.